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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,967	08/15/2005	Kevin Wood	J318-196 US	6914
21706 7590 07/09/2007 NOTARO AND MICHALOS 100 DUTCH HILL ROAD SUITE 110 ORANGEBURG, NY 10962-2100			EXAMINER LEE, GILBERT Y	
			ART UNIT 3673	PAPER NUMBER
			MAIL DATE 07/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,967	Applicant(s) WOOD ET AL.	
	Examiner Gilbert Y. Lee	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. The claim for priority must be stated in the first sentence of the disclosure or in an application datasheet.

Specification

2. The disclosure is objected to because of the following informalities: the specification is missing the appropriate headings.

Appropriate correction is required.

Claim Objections

3. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 claims a range of 8 to 12 kg/m³ and claim 6 claims a larger range of 5 to 15 kg/m³. The dependent claim must have a range that is more narrow than the claim from which it depends.
4. Claim 15 is objected to because of the following informalities: in line 5, "sealant" should be changed to --sealing--. Claim 15 also recites "a sealant barrier" in lines 5 and 5; however, a sealant barrier is already claimed in claim 1. For the purposes of this

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examination, the examiner is interpreting claim 15 to be claiming "the sealant barrier" of claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8-11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weingartner et al. (US Patent No. 5,283,918) in view of Zschke (US Pub. No. 2005/0222361).

Regarding claim 1, the Weingartner et al. reference discloses a cushion (Fig. 2) suitable for use in an aircraft seat, said cushion comprising a foam structure having a first region (e.g. 8) of a low-density foam, a second region (e.g. 1) of a foam (e.g. 38) and a sealing barrier (e.g. 37) disposed at the interface between said first and second region (Fig. 2), including the foams being made of plastic foams.

However, the Weingartner et al. reference fails to explicitly disclose the first region foam being made of a low-density flame retardant foam having a density within the range from 8 to 12 kg/m³ as well as the second region being made of a flame retardant polyurethane foam.

The Zschke et al. reference, a method of making polyurethane foam, discloses the use of a flame retardant polyurethane foam (Abstract) and having a density of from 10-150 kg/m³ (Para. [0120]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a first region with a polyurethane foam having a density within the range from 8 to 12 kg/m³ and providing a polyurethane foam to the second region to the Weingartner et al. reference in view of the teachings of the Zschke et al. reference in order to provide a foam that is flame retardant while providing the user with the desired amount of comfort.

Regarding claim 2, the Weingartner et al. reference, as modified in claim 1, discloses the second region enclosing, at least in part, a core (e.g. 8) comprising the first region (Fig. 2).

Regarding claim 3, the modified Weingartner et al. reference discloses the invention substantially as claimed in claim 1, including the seal barrier being made of plastics (Col. 11, Lines 23-31).

However, the modified Weingartner et al. fails explicitly disclose the seal barrier comprising any of polyethylene, polyurethane or polyvinylchloride.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the sealing barrier with polyvinylchloride, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious mechanical expedience.

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Regarding claim 4, the Weingartner et al. reference, as modified in claim 1, discloses the ratio of the volume of the first region to the second region being in the range from 20:80 to 80:20 (Fig. 2).

Regarding claim 5, the modified Weingartner et al. reference discloses the invention substantially as claimed in claim 1.

However, the modified Weingartner et al. reference fails to explicitly disclose the ratio of the volume of the first region to the second region being substantially 50:50.

Discovering an optimum range of a result effective variable involves only routine skill in the art. Since applicant has not shown some unexpected result the inclusion of this limitation is considered to be a matter of choice in design. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the ratio of the volume of the first region to the second region being in the range from 50:50 as a matter of mechanical expedience.

Regarding claim 6, the Weingartner et al. reference, as modified in claim 1 and as best understood, discloses the first region comprising foam having a density within the range of 5 to 15 kg/m³ (Zaschke et al., Para. [0120]).

Regarding claim 8, the Weingartner et al. reference, as modified in claim 1, discloses the first region comprising melamine foam (Zaschke et al., Para. [0112]).

Regarding claims 9 and 10, the Weingartner et al. reference, as modified in claim 1, discloses the second region comprising a foam having a density within the range from 30 to 70 kg/m³ and more specifically 40 to 65 kg/m³ (Zaschke et al., Para. [0120]).

Regarding claim 11, the Weingartner et al. reference, as modified in claim 1, discloses the second region comprising at least one flame retardant additive (Zaschke et al., Para. [0112]).

Regarding claim 13, the Weingartner et al. reference, as modified in claim 1, discloses a fire blocking layer (e.g. 44) being provided over at least a part of the second region (Weingartner et al., Fig. 2).

Regarding claim 14, the Weingartner et al. reference, as modified in claim 1, discloses the cushion being used in an aircraft seat (Weingartner et al., Abstract).

Regarding claim 15, the Weingartner et al. reference, as modified in claim 1, discloses a method of manufacturing a cushion suitable for use in an aircraft seat comprising the steps of:

- (i) fabricating the low-density flame retardant foam into the desired configuration (Fig. 2);
- (ii) coating the surface of the said low-density flame retardant foam with the sealant barrier (Weingartner et al., Col. 11, Lines 3-35); and
- (iii) applying the flame retardant polyurethane foam to the sealing barrier (Weingartner et al., Col. 11, Lines 3-35).

Conclusion

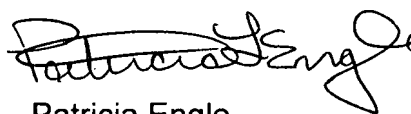
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL
June 25, 2007

A handwritten signature in black ink, appearing to read "Patricia Engle", with a stylized flourish at the end.

Patricia Engle
Supervisory Examiner
Tech. Center 3600